

What is Claimed Is:

1. A method in a server configured for executing voice web applications, the method comprising:

5 receiving a first hypertext markup language (HTML) request, generated by a user browser, for a first page for transport to the user browser via a Hypertext Transport Protocol (HTTP) connection;

accessing a selected extensible markup language (XML) page in response to reception of the first HTML request; and

10 generating the first page based on runtime execution of the selected XML page by the server, the generating step including supplying voice application control content within the first page for execution by the user browser.

2. The method of claim 1, wherein the receiving step includes:

accessing a second XML page, having XML tags that specify establishment of a connection, in response to a connection request from a web server;

5 establishing the connection with the web server based on the runtime execution of the second XML page; and

receiving the first HTML request via the connection with the web server.

3. The method of claim 2, wherein the step of establishing the connection includes establishing a connection using an open source executable connection resource.

4. The method of claim 3, wherein the accessing step includes obtaining the second XML page from an XML document database configured for storing a plurality of XML pages.

5. The method of claim 1, wherein the accessing step includes obtaining the selected XML

page from an XML document database configured for storing a plurality of XML pages.

6. The method of claim 5, wherein the step of obtaining the selected XML page includes identifying the selected XML page based on an identifier supplied by the first HTML request.

7. The method of claim 6, wherein the step of generating the first page includes: accessing a second XML page, that specifies a state of the user browser relative to a prescribed user session, based on a second identifier within the first HTML request;

determining the state of the user browser by parsing the second XML page; and
5 identifying the first page to be generated in response to logic specified within the selected XML page and based on the determined state of the user browser.

8. The method of claim 7, wherein the step of generating the first page further includes: accessing a third XML page that specifies generation of the first page, in response to identification of the first page using the logic specified within the selected XML page; and dynamically generating the first page by runtime execution of the third XML page.

9. The method of claim 7, further comprising:
updating the state specified in the second XML page based on the dynamically generated first page; and
storing the updated second XML page.

10. The method of claim 7, wherein the identifying step includes:
accessing from the XML document database a third XML page specified by the logic;
initiating a function call, specified by the third XML page, to a remote resource according to Internet Protocol (IP);
receiving results of the function call from the remote resource; and

determining the identification of the first page based on the received results and according to the logic specified in the selected XML page.

11. The method of claim 1, wherein the generating step includes dynamically generating the first page in response to user interface generation parameters specified in the selected page, the first page including at least one of a first HTML tag specifying information to be displayed by the user browser, a second HTML tag specifying an input to be submitted by the user browser, and an XML tag configured for specifying an audio operation to be executed by the user browser.

12. The method of claim 11, wherein the dynamically generating step includes generating the XML tag for specifying a record operation for the user browser.

13. The method of claim 11, wherein the dynamically generating step includes generating the XML tag for specifying a playback operation of a prescribed audio file by user browser.

14. The method of claim 1, wherein the generating step includes executing logic specified by the selected XML page and based on the first HTML request.

15. The method of claim 14, wherein the generating step includes:

accessing and executing a first XML page in response to detecting prescribed information in the first HTML request and based on the logic specified by the selected XML page; and

accessing and executing a second XML page in response to one of a determined absence of
5 the prescribed information and a detection of second prescribed information in the first HTML request and based on the logic specified by the selected XML page, wherein execution of one of the first and second XML pages provides a corresponding voice application content for the first page.

16. The method of claim 1, wherein the generating step includes:

- initiating a function call, specified by the selected XML page, to an external resource according to Internet protocol (IP);
- 5 receiving results of the function call from the external resource; and
- dynamically generating the first page based on the received results from the external resource.
17. The method of claim 16, wherein the initiating step includes the function call according to one of Lightweight Directory Access Protocol (LDAP), Internet Message Access Protocol (IMAP), and Simple Mail Transfer Protocol (SMTP).
18. A server system configured for executing voice web applications, the system including:
an extensible markup language (XML) database configured for storing a plurality of XML documents, each XML document specifying at least one executable voice web application parameter;
and
- 5 an executable resource configured for runtime execution of the XML documents, the executable resource including an XML parser configured for parsing at least a first of the XML documents selected based on a received hypertext markup language (HTML) request from the user browser across a hypertext transport protocol (HTTP) connection, the executable resource dynamically generating an HTML response to the HTML request that includes voice application content, based on the corresponding executable voice web application parameter parsed from the first XML document.
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19. The server system of claim 18, wherein the executable resource is configured for implementing an XML tag in the first XML document that specifies the executable voice web application parameter.
20. The server system of claim 19, wherein the executable resource executes one of a user

interface operation, a logical operation, and a function call to an external resource, based on the XML tag.

21. The server system of claim 20, wherein the user interface operation corresponds to at least one of providing an audible menu prompt to the user and providing a voice recording control for voice recording by the user browser.

22. The server system of claim 20, further comprising an XML memory configured for storing XML pages that specify application states of respective user sessions, the executable resource selectively performing the logical operation based on parsing a selected one of the stored XML pages that specifies the application state corresponding to the user browser.

23. The server system of claim 20, wherein the executable resource generates the function call to the external resource as specified in the XML tag and according to Internet protocol.

24. The server system of claim 23, wherein the executable resource generates the function call according to one of Lightweight Directory Access Protocol (LDAP), Internet Message Access Protocol (IMAP), and Simple Mail Transfer Protocol (SMTP).

25. A computer readable medium having stored thereon sequences of instructions for executing web applications by a server, the sequences of instructions including instructions for performing the steps of:

receiving a first hypertext markup language (HTML) request, generated by a user browser, for a first page for transport to the user browser via a Hypertext Transport Protocol (HTTP) connection;

accessing a selected extensible markup language (XML) page in response to reception of the first HTML request; and

generating the first page based on runtime execution of the selected XML page by the server,
10 the generating step including supplying voice application control content within the first page for
execution by the user browser.

26. The medium of claim 25, wherein the receiving step includes:

accessing a second XML page, having XML tags that specify establishment of a connection,
in response to a connection request from a web server;
establishing the connection with the web server based on the runtime execution of the second
5 XML page; and

receiving the first HTML request via the connection with the web server.

27. The medium of claim 26, wherein the step of establishing the connection includes
establishing a connection using an open source executable connection resource.

28. The medium of claim 27, wherein the accessing step includes obtaining the second XML
page from an XML document database configured for storing a plurality of XML pages.

29. The medium of claim 25, wherein the accessing step includes obtaining the selected XML
page from an XML document database configured for storing a plurality of XML pages.

30. The medium of claim 29, wherein the step of obtaining the selected XML page includes
identifying the selected XML page based on an identifier supplied by the first HTML request.

31. The medium of claim 30, wherein the step of generating the first page includes:

accessing a second XML page, that specifies a state of the user browser relative to a
prescribed user session, based on a second identifier within the first HTML request;
determining the state of the user browser by parsing the second XML page; and

5 identifying the first page to be generated in response to logic specified within the selected XML page and based on the determined state of the user browser.

32. The medium of claim 31, wherein the step of generating the first page further includes: accessing a third XML page that specifies generation of the first page, in response to identification of the first page using the logic specified within the selected XML page; and dynamically generating the first page by runtime execution of the third XML page.

33. The medium of claim 31, further comprising instructions for performing the steps of: updating the state specified in the second XML page based on the dynamically generated first page; and

storing the updated second XML page.

34. The medium of claim 31, wherein the identifying step includes: accessing from the XML document database a third XML page specified by the logic; initiating a function call, specified by the third XML page, to a remote resource according to Internet Protocol (IP); receiving results of the function call from the remote resource; and determining the identification of the first page based on the received results and according to the logic specified in the selected XML page.

35. The medium of claim 25, wherein the generating step includes dynamically generating the first page in response to user interface generation parameters specified in the selected page, the first page including at least one of a first HTML tag specifying information to be displayed by the user browser, a second HTML tag specifying an input to be submitted by the user browser, and an XML tag configured for specifying an audio operation to be executed by the user browser.

36. The medium of claim 35, wherein the dynamically generating step includes generating the XML tag for specifying a record operation for the user browser.

37. The medium of claim 35, wherein the dynamically generating step includes generating the XML tag for specifying a playback operation of a prescribed audio file by user browser.

38. The medium of claim 25, wherein the generating step includes executing logic specified by the selected XML page and based on the first HTML request.

39. The medium of claim 38, wherein the generating step includes:
accessing and executing a first XML page in response to detecting prescribed information in the first HTML request and based on the logic specified by the selected XML page; and
accessing and executing a second XML page in response to one of a determined absence of the prescribed information and a detection of second prescribed information in the first HTML request and based on the logic specified by the selected XML page, wherein execution of one of the first and second XML pages provides a corresponding voice application content for the first page.

5 40. The medium of claim 25, wherein the generating step includes:
initiating a function call, specified by the selected XML page, to an external resource according to Internet protocol (IP);
receiving results of the function call from the external resource; and
dynamically generating the first page based on the received results from the external resource.

41. The medium of claim 40, wherein the initiating step includes the function call according to one of Lightweight Directory Access Protocol (LDAP), Internet Message Access Protocol (IMAP), and Simple Mail Transfer Protocol (SMTP).